



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

JUL 31 2012

Darryl Smalls, Commissioner
U.S. Virgin Islands Department of Public Works
8244 Sub Base, St. Thomas
Charlotte Amalie, St. Thomas, Virgin Islands 00802-5805

Dear Mr. Smalls:

This is in response to your request for a Categorical Exclusion (CATEX) from substantive environmental review requirements, pursuant to 40 CFR Part 6, for your wastewater interceptor rehabilitation project located in the Southwest area of St. Croix, U.S. Virgin Islands. The Department of Public Works is seeking funds through a federal construction grant.

The aging Southwest Interceptor is in poor condition due to usage over time. The proposed rehabilitation of the degraded gravity flow wastewater interceptor involves inspection and cleaning followed by cured-in-place pipe linings of approximately 4,000 linear feet of existing 24-inch and 30-inch sanitary sewer pipes. This interceptor runs underground within the rights-of-way on the following previously disturbed roadways in the Estate Diamond area: Route 63, Friends Drive, an unnamed road, and Route 632. Using conventional construction methods to replace or repair degraded sections of sanitary sewer pipes by disturbing large areas of ground surface to expose the existing pipes is prohibitively expensive or is otherwise impractical. The cured-in-place pipe lining technology is a relatively new trenchless method to immediately repair pipe interiors requiring minor ground-disturbing activity. Twenty manholes connected to this interceptor also need inspecting, cleaning, repairing of structures with epoxy coating, reinforcing of wall structures, and replacing of manhole covers. However, if a pipeline and/or manhole structure cannot be repaired or rehabilitated, then replacement(s) may be necessary. Completing this project will extend the useful life of the Southwest Interceptor.

The project meets the CATEX eligibility criteria found in 6.204(a)(1)(ii). This category includes "actions relating to existing infrastructure systems (such as sewer systems, drinking water supply systems, and stormwater systems, including combined sewer overflow systems) that involve minor upgrading, or minor expansion of system capacity or rehabilitation (including functional replacement) of the existing system and system components (such as the sewer collection network and treatment system; the system to collect, treat, store and distribute drinking water; and stormwater systems, including combined sewer overflow systems) or construction of new minor ancillary facilities adjacent to or on the same property as existing facilities."

This project does not involve a new or relocated discharge to surface or ground water, an increase in the volume or loading of pollutants to receiving water, or capacity to serve a population 30 percent greater than the existing population. Further, it is not contrary to any state or regional growth plan or strategy; and it is not primarily for the purpose of future development.

Additionally, the available information you provided concerning the proposed action indicates that none of the specific criteria for not granting a CATEX, found in 40 CFR 6.204(b)(1) through (b)(10), are present.

Based on our review, EPA approves the request for the CATEX. Please be reminded that EPA may revoke this CATEX if any of the following conditions occur:

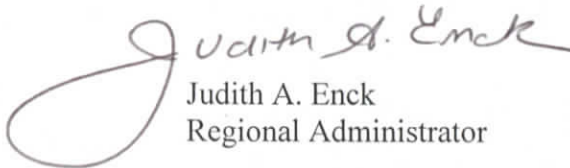
- changes in the proposed action render it ineligible for exclusion,
- new evidence indicates that serious local or environmental issues exist, or
- federal, state, or local laws would be violated.

Furthermore, EPA strongly encourages project sponsors to incorporate green practices into all phases of a project, including planning, design, and construction. Such practices can promote sustainable infrastructure, support development of a "green" workforce, and reduce long-term operation and maintenance costs. For your information, we are enclosing a fact sheet that identifies a variety of recommendations that should be given consideration in future projects. EPA hopes to see green practices incorporated as a standard part of future projects in the U.S. Virgin Islands.

This CATEX will be available on the EPA website at <http://www.epa.gov/region02/spmm/r2nepa.htm>.

Should you have any questions regarding this decision, please address them to Grace Musumeci, Chief, Environmental Review Section, at the above address.

Sincerely,



Judith A. Enck
Regional Administrator

Enclosure

cc: May Adams Cornwall, P.E., Executive Director, VIWMA
Laurie Williams, Director of Engineering, VIWMA
James Grum, P.E., Chief Engineer, VIWMA
Jomo McClean, Chief Engineer, DPW

EPA Region 2 Green Recommendations

To the maximum extent possible, project managers are encouraged to utilize local and recycled materials; to recycle materials generated onsite; and to utilize technologies and fuels that minimize greenhouse gas emissions.

Further, to the extent feasible, renewable energy (including, but not limited to solar, wind, geothermal, biogas, and biomass) and energy-efficient technologies should be incorporated into the design, construction, and operation of all types of projects.

To that end, the following information and internet hyperlinks are provided for your consideration and use:

- **Multi-media green building and land design practices**

Utilize green building practices which have multi-media benefits, including energy efficiency, water conservation (see WaterSense below), and healthy indoor air quality. Apply building rating systems and no-cost online tools and guides, such as ENERGY STAR, Portfolio Manager, Target Finder, Indoor Air Quality Package, and WaterSense for building construction. The ENERGY STAR website (see below) includes, among other things, information on new single-family homes, multi-family homes, commercial and other buildings, and schools. The website also provides an ENERGY STAR "Training Center" free of charge.

U.S. Green Building Council (USGBC) LEED Programs and Guides:

<http://www.usgbc.org/programs>

ENERGY STAR home page: <http://www.energystar.gov>

ENERGY STAR Target Finder (no-cost online tool to set energy performance targets):

<http://www.energystar.gov/targetfinder>

Indoor Air Quality: <http://www.epa.gov/iaq>

- **Water conservation and efficiency in building construction**

Promote water conservation and efficiency through the use of water efficient products and practices. For new building construction and restoration projects, we recommend considering the use of products with the WaterSense label where appropriate. Devices receiving the EPA WaterSense label must be at least 20% more water efficient than (and must meet or exceed the performance standards of) non-labeled devices of the same type. Additionally, when possible, consider the use of WaterSense Certified Professional Irrigation Partners and WaterSense Builder Partners. These professionals use WaterSense labeled devices where appropriate, are trained in the latest water conservation practices, and use the latest water efficiency tools and technologies, including irrigation equipment and xeriscaping for landscaping and best management practices for construction in the WaterSense New Home Specifications. Visit the WaterSense website for tips on water efficiency, a WaterSense labeled product search tool, a list of WaterSense Partners, access to the Water Budget Tool at: <http://www.epa.gov/watersense/>

In addition to using WaterSense labeled products and certified professionals, there are many water conservation strategies and best management practices that can be used in new construction and/or restoration. Here are some useful links to water conservation information:

- Green Building Encyclopedia:
http://www.whyygreenbuildings.com/water_conservation.php
- Whole Building Design Guide:
http://www.wbdg.org/resources/water_conservation.php
- Alliance for Water Efficiency:
<http://www.allianceforwaterefficiency.org/>
- Water Use It Wisely – 100 Ways to Conserve:
<http://www.wateruseitwisely.com/100-ways-to-conserve/index.php>

- **Green Building in Federal Agency Projects**

The *Federal Green Construction Guide for Specifiers* includes helpful information for procuring green building products and construction/renovation services within the Federal government:

<http://www.wbdg.org/design/greenspec.php>

- **Use Environmentally Preferable Purchasing**

Promote markets for environmentally preferable products by referencing EPA's multi-attribute Environmentally Preferable Purchasing guidance. Products and services include: Building and Construction, Carpets, Cleaning, Electronics, Fleets, Food Services, Landscaping, Meetings and Conferences, Office Supplies, and Paper.

Additional information: <http://www.epa.gov/epp>

- **Purchase 'green' electronics, and measure their benefits**

Require the purchase of desktop computers, monitors, and laptops that are registered as Silver or Gold products with EPEAT, the Electronics Product Environmental Assessment Tool at www.epeat.net. Products registered with EPEAT use less energy, are easier to recycle, and can be more easily upgraded than non-registered products. Energy savings, CO₂ emission reductions, and other environmental benefits achieved by the purchase, use and recycling of EPEAT-registered products can be quantified using the Electronics Environmental Benefits Calculator:

<http://eerc.ra.utk.edu/ccpct/eebc/eebc.html>

Additional information:

http://www.energystar.gov/index.cfm?c=products.pr_find_es_products

- **Consider Low Impact Development to help manage storm water**

Low Impact Development (LID) is an approach to land development (or re-development) that works with nature to manage storm water as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat storm water as a resource rather than a waste product.

Implement site planning, design, construction, and maintenance strategies to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the building site with regard to the temperature, rate, volume, and duration of flow.

Additional information:

<http://www.epa.gov/nps/lid>

<http://water.epa.gov/infrastructure/greeninfrastructure/>

- **Evaluate sustainable storm water management at brownfield sites**

Consider designs for storm water management on compacted, contaminated soils in dense urban areas:

Additional information: <http://www.epa.gov/brownfields/tools/swdp0408.pdf>

- **Alternative and Renewable Energy**

The Department of Energy's "Green Power Network" (GPN) provides information and markets that can be used to supply alternative generated electricity. The following link identifies several suppliers of renewable energy:

Additional information:

http://apps3.eere.energy.gov/greenpower/buying/buying_power.shtml?

- **Clean Diesel**

For new equipment utilize contract specifications requiring advanced pollution controls and clean fuels: <http://www.northeastdiesel.org/pdf/NEDC-Construction-Contract-Spec.pdf> and <http://www.epa.gov/diesel/construction/contract-lang.htm>

Implement diesel controls, cleaner fuel, and cleaner construction practices for on-road and off-road equipment used for transportation, soil movement, or other construction activities, including:

1. Strategies and technologies that reduce unnecessary idling, including auxiliary power units, the use of electric equipment, and strict enforcement of idling limits;
2. Use of ultra low sulfur diesel fuel in non-road applications; and
3. Use of clean diesel through add-on control technologies like diesel particulate filters and diesel oxidation catalysts, repowers, or newer, cleaner equipment.

Additional information: *A How To Guide for Diesel Engine Retrofits in the Construction Industry:* <http://www.mass.gov/dep/air/diesel/conretro.pdf>

- **Utilizing recycled materials in construction projects**

Many industrial and construction byproducts are available for use in road, building or infrastructure construction. Use of these materials can save money and reduce environmental impacts. The Recycled Materials Resource Center has developed user guidelines for many recycled materials and compiled existing national specifications.

Additional information: <http://rmrc.wisc.edu>

<http://www.fhwa.dot.gov/pavement/recycling/rectools.cfm>

<http://www.epa.gov/osw/conserves/imr/index.htm>

- **Encourage cost-efficient, environmentally friendly landscaping**

EPA's GreenScapes program provides cost-efficient and environmentally friendly solutions for landscaping. Designed to help preserve natural resources and prevent waste and pollution, GreenScapes encourages companies, government agencies, other entities, and homeowners to make more holistic decisions regarding waste generation and disposal and the associated impacts on land, water, air, and energy use.

Additional information: <http://www.epa.gov/osw/conserves/rrr/greenscapes/index.htm>

- **Incorporate on-site energy generation and energy efficient equipment upgrades into projects at drinking water and wastewater treatment facilities**

Consider using captured biogases in combined heat and power systems, and renewable energy (wind, solar, etc.) to generate energy for use on-site. Evaluate the potential energy savings associated with upgrading to more energy efficient equipment (pumps, motors, lighting, etc.).

Additional information: <http://water.epa.gov/infrastructure/sustain/goinggreen.cfm>
<http://www.epa.gov/region9/waterinfrastructure/howto.html>

- **Incorporate green practices into remediation of contaminated sites**

Encourage or incentivize the use of green remediation practices, including designing treatment systems with optimum energy efficiency; use of passive energy technologies such as bio-remediation and phyto-remediation; use of renewable energy to meet power demands of energy-intensive treatment systems or auxiliary equipment; use of cleaner fuels, machinery, and vehicles; use of native plant species; and minimizing waste and water use.

Additional information: <http://clu.in.org/greenremediation/index.cfm>

- **Encourage development in brownfield sites**

Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. These sites are often "infrastructure-ready," eliminating the need to build new roads and utility lines which are necessary in undeveloped land.

Additional information: <http://www.epa.gov/brownfields/>

- **Encourage use of Smart Growth and transit-oriented development principles**

Smart Growth and transit oriented development (TOD) principles help preserve natural lands and critical environmental areas, and protect water and air quality by encouraging developments that are mixed-use, walkable and located near public transit. Encourage use of bicycling with bike commuter parking, storage, and changing facilities. Facilitate increased carpooling or alternative vehicles with preferable parking spaces and/or electric vehicle plug in spots.

Additional information: <http://www.epa.gov/smartgrowth>

- **Integrated Design Process**

The Integrated Design Process calls for the active and continuing engagement of all stakeholders throughout the building design, development, construction, and post-construction phases including the owners, architects, engineers, building department officials, and others. This process creates a higher-performing building at lower cost, allows various building systems to work together to eliminate redundant and unnecessary capacity, and minimizes change order costs.

Additional information: http://www.wbdg.org/design/engage_process.php